DaimlerChrysler AG

Patent Claims

1. A chassis and/or supporting structure (6) of a motor vehicle (19), in particular of a passenger vehicle, characterized by the chassis and/or the supporting structure (6) being designed as a hollow chamber sheet structure.

2. The chassis and/or supporting structure of a motor vehicle as claimed in claim 1, characterized in that, in the case of a motor vehicle (19) having two or more axles, a bottom hollow chamber sheet (1) arranged between the axles is adjoined in the region of the axles by vertical, flanking hollow chamber sheets (4), the vertical sheets (4) being stiffened and/or connected to one another in the transverse direction of the vehicle by further hollow chamber sheets (15) and/or struts.

3. The chassis and/or supporting structure of a motor vehicle, in particular as claimed in claim 1 or 2, characterized in that within the chassis and/or the supporting structure (6) flow ducts (10) are formed between at least one inflow opening (2) on a front part of the vehicle and at least one outflow opening (3) at the rear (23) of the vehicle.

4. The chassis and/or supporting structure of a motor vehicle, as claimed in claim 3, characterized in that the outflow openings (3) at the rear (23) of the vehicle (19) are arranged and designed in such a manner that a dirtying of the rear (23) is reduced.

5. The chassis and/or supporting structure of a motor vehicle, as claimed in either of claims 3 and 4, characterized in that the outflow openings (3) at the

rear (23) of the vehicle (19) are arranged and designed in such a manner that air vortices at the rear (23) of the vehicle are reduced.

6. The chassis and/or supporting structure of a motor vehicle, as claimed in one of claims 3 to 5, characterized in that a passenger cell (20) is ventilated and vented by the flow ducts (10) or by some of them.

7. The chassis and/or supporting structure of a motor vehicle, as claimed in one of claims 1 to 6, characterized in that the hollow chamber sheets (1, 4, 15) are designed as light metal elements.

8. The chassis and/or supporting structure of a motor vehicle, as claimed in one of claims 1 to 6, characterized in that the hollow chamber sheets (1, 4, 15) are designed as plastic elements.

9. The chassis and/or supporting structure of a motor vehicle, as claimed in one of claims 1 to 8, characterized in that the hollow chamber sheets (1, 4, 15) are designed as extruded profiles.

10. The chassis and/or supporting structure of a motor vehicle, as claimed in one of claims 1 to 8, characterized in that the hollow chamber sheets (1, 4, 15) are designed as built-up profiles, in particular of sheet metal.

11. The chassis and/or supporting structure of a motor vehicle, as claimed in one of claims 1 to 10, characterized in that the lifting effect of the vehicle (19) is reduced by the flow ducts (10) and/or the inflow and outflow openings (2, 3) thereof.

12. The chassis and/or supporting structure of a motor

vehicle, as claimed in one of claims 1 to 10, characterized in that downforce of the vehicle (19) is achieved by the flow ducts (10) and/or the inflow and outflow openings (2, 3) thereof.

13. The chassis and/or supporting structure of a motor vehicle, as claimed in one of claims 1 to 12, characterized in that the flow ducts (10) are of controllable design by means of flaps at the inflow and outflow openings (2, 3).